lack S

CLAIMS

Amethod for analyzing a timing report, the method comprising the steps of: grouping timing paths that share common characteristics; creating a list file containing the timing paths;

searching a timing report for timing paths that match the timing paths in the list file; generating a first summary report on the timing paths in the input list, the first summary report listing the status of the timing paths; and

determining whether there are new timing path(s) not found in the input list.

- 2. The method of Claim 1, further comprising the steps of: generating a second summary report on new timing path(s), if there are new timing paths; and repeating the steps until all negative timing paths are identified.
- 3. The method of Claim 1, wherein the step of grouping timing paths that share common characteristics further comprises the step of classifying the timing paths as unique timing paths.
- 4. The method of Claim 1, wherein, in the step of grouping timing paths that share common characteristics, wild cards are used to group the timing paths.
 - 5. The method of Claim 1, further comprising the step of: generating a path table for checking against matching paths in the timing report.
- 6. The method of Claim 1, wherein the status of the timing paths comprise path numbers and slack.

20

20

25

5

7. A computer program product for analyzing a timing report file, the computer program product having a medium with a computer program embodied thereon, the computer program comprising:

computer program code for reading in a list file containing unique timing paths grouped from a plurality of timing paths.

computer program code for reading in timing paths stored in the timing report file; computer program code for extracting information from the timing paths; and computer program code for comparing the information to the timing paths contained in the list file.

- 8. The computer program product of Claim 7, wherein the information on extracted from each timing path comprises a path number, slack, source, and destination.
- 9. The computer program product of Claim 7, further comprising computer program code for generating a path table from the timing paths contained in the list file.
- 10. The computer program product of Claim 7, further comprising:
 computer program code for generating a path table from the timing paths contained in the list file; and

computer program code for updating the path table when a match is found between a timing path in the timing report file and a timing path in the list file.

- 11. An apparatus for analyzing a timing report, the apparatus comprising: means for grouping timing paths that share common characteristics; means for creating a list file containing the timing paths;
- means for searching the timing report for timing paths that match the timing paths in the list file;

5

means for generating a first summary report on the timing paths in the input list, the first summary report listing the status of the timing paths; and

means for determining whether there are new timing path(s) not found in the input list.

- 12. The apparatus of Claim 11, further comprising:
 means for generating a second summary report on new timing path(s), if there are new timing paths.
- 13. The apparatus of Claim 11, wherein the means for grouping timing paths that share common characteristics further comprises means for classifying the timing paths as unique timing paths.
- 14. The apparatus of Claim 11, wherein the means for grouping timing paths that share common characteristics uses wild cards to group the timing paths.
 - 15. The apparatus of Claim 1, further comprising:
 means for generating a path table for checking against matching paths in the timing report.
- 16. The apparatus of Claim 11, wherein the status of the timing paths comprises path numbers and slack.